

AMENDMENT TO THE CLAIMS

1-2. (Cancelled)

3. (Currently amended) A driver circuit, comprising:

a constant current section for outputting a prescribed positive or negative current;

a first pad capable of being connected to the other end of a first resistor having [[its]] one end connected to a first node receiving a first voltage;

a second pad capable of being connected to the other end of a second resistor having [[its]] one end connected to the first node;

a first switching element connected between an output node of the constant current section and the first pad and turned ON/OFF in response to a first signal;

a second switching element connected between the output node of the constant current section and the second pad and turned ON/OFF in response to a second signal that is complementary to the first signal; and

a control section for controlling a potential at the output node of the constant current section to a prescribed potential,

wherein the control section varies an on-state resistance value of the first and second switching elements according to the potential at the output node of the constant current section, so that the timing at which the first switching element is turned ON/OFF and the timing at which the second switching element is turned ON/OFF are the same, and

wherein the first switching element includes a first transistor connected between the output node of the constant current section and the first pad and turned ON/OFF in response to the first signal,

the second switching element includes a second transistor connected between the output node of the constant current section and the second pad and turned ON/OFF in response to the second signal, and

the control section varies a substrate potential of the first and second transistors according to the potential at the output node of the constant current section.

4. (Cancelled)

5. (Original) The driver circuit according to claim 3, wherein the prescribed potential is set to a value close to an intermediate potential of minimum and maximum values of a gate potential of the first or second transistor minus a threshold potential of the first or second transistor.

6-11. (Cancelled)

12. (Currently amended) A driver circuit, comprising:

a constant current section for outputting a prescribed positive or negative current;

a first pad;

a second pad;

a first switching element connected between an output node of the constant current section and the first pad and turned ON/OFF in response to a first signal;

a second switching element connected between the output node of the constant current section and the second pad and turned ON/OFF in response to a second signal complementary to the first signal;

a first resistor connected between a first node receiving a first voltage and the first pad;

a second resistor connected between the first node and the second pad; and

a control section for controlling a potential at the output node of the constant current section to a prescribed potential,

wherein the control section varies an on-state resistance value of the first and second switching elements according to the potential at the output node of the constant current section, so that the timing at which the first switching element is turned ON/OFF and the timing at which the second switching element is turned ON/OFF are the same, and

wherein the first switching element includes a first transistor connected between the output node of the constant current section and the first pad and turned ON/OFF in response to the first signal,

the second switching element includes a second transistor connected between the output node of the constant current section and the second pad and turned ON/OFF in response to the second signal, and

the control section varies a substrate potential of the first and second transistors according to the potential at the output node of the constant current section.

13. (Cancelled)

14. (Original) The driver circuit according to claim 12, wherein the prescribed potential is set to a value close to an intermediate potential of minimum and maximum values of a gate potential of the first or second transistor minus a threshold potential of the first or second transistor.

15-19. (Cancelled)